

Abstract

An embodiment is a catheter comprising a first elongate shaft having a proximal
5 end, a distal end and a first lumen therethrough, a wire having a proximal end and a distal
end at least partially disposed in the first elongate shaft, the distal end extending distally
from the first elongate shaft, and a motion control apparatus connected to the proximal
end of the wire, further comprising a device attached to the distal end of the wire for
changing the shape of an embolus, wherein the device is configured to change the shape
10 of the embolus to unclog a distal catheter lumen.